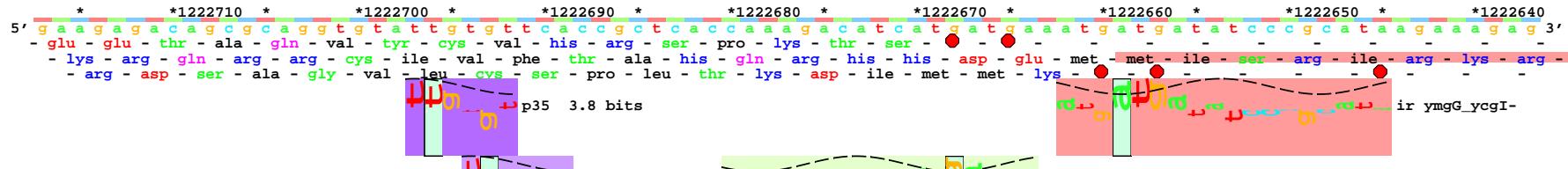


- 1 -

piece 1, NC\_000913, ymgG\_ycgI-, config: linear, direction: --, begin: 1222717, end: 1222132



**p35** 2.5 bits      **sd**  
{-----} sd-(9)-ir 1222659 Gap 2.3 bits  
{-----} sd-ir 1222659 vmoG vcgI- total 5.8 bits

{-----} p35-(23)-p10 1222673 Gap 1.4 bits  
|-----| p35-p10 1222673 total 5.8 bits

{-----} p35-(23)-p10 1222670 Gap 1.4 bits  
----- p35-p10 1222670 total 4.7 bits

The diagram illustrates the reading frame of a bacterial ribosome. The top part shows the mRNA sequence with codons and their corresponding amino acids: \*1222630 (his), \*1222620 (phe), \*1222610 (leu), \*1222600 (his), \*1222590 (ala), \*1222580 (val), \*1222570 (arg), and \*1222560 (leu). Below the sequence, the amino acid sequence is given as: his - phe - leu - his - ala - val - arg. The bottom part shows the ribosomal subunits (30S and 50S) with tRNA molecules (tRNA<sub>fMet</sub>, tRNA<sub>asp</sub>, tRNA<sub>lys</sub>, tRNA<sub>lys</sub>, tRNA<sub>ser</sub>, tRNA<sub>leu</sub>, tRNA<sub>phe</sub>, tRNA<sub>ser</sub>, tRNA<sub>asn</sub>, tRNA<sub>thr</sub>, tRNA<sub>val</sub>, tRNA<sub>val</sub>, tRNA<sub>arg</sub>, tRNA<sub>leu</sub>, tRNA<sub>ser</sub>, tRNA<sub>phe</sub>) and their binding sites on the mRNA. Two regions are highlighted: orf 16 codons (16 codons, 3.5 bits) and p35 (16 codons, 4.3 bits).

|-----| p35-p10\_1222579\_total\_6\_4\_bits

... p35

```
{- ... p35-(21)-p10 1222535 Gap  
.  
.(24)-p10 1222560 Gap 2.4 bits  
p10 1222560 total 5.5 bits  
|- ... p35-p10 1222535 total 4.8  
{- ... p35-(26)-p10 1222530 Gap  
|- ... p35-p10 1222530 total 7.1
```

Diagram illustrating the gene structure of ymgG and ycgI. The gene spans from position 1222550 to 1222480. The reading frame for ymgG starts at position 1222550 and ends at 1222480. The reading frame for ycgI starts at position 1222480. Promoters are indicated by arrows above the sequence, and start sites are marked with red dots.

The diagram illustrates the structure of a sequence with the following components:

- sd-(17)-ir**: A segment starting at position 1222527 with a gap of 6.5 bits.
- p35**: A segment with a length of 3.4 bits.
- sd-ir**: A segment starting at position 1222527 with a total length of 7.2 bits, including the previous segments.
- ymsgG\_ycgI-**: A segment starting at position 1222535 with a gap of 3.3 bits.
- p35-(21)-p10**: A segment starting at position 1222535 with a total length of 3.3 bits.

